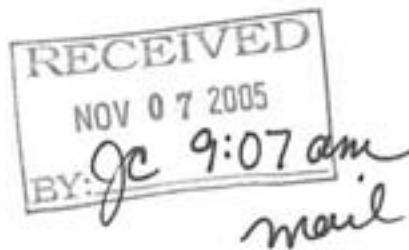


APPENDIX R



770 L Street, Suite 800
Sacramento, California 95814
main 916.447.0700
fax 916.447.4781
www.stoel.com

BARBARA A. BRENNER
babrenner@stoel.com

October 31, 2005

Via Email: northernpike@dfg.ca.gov;
Facsimile: 530-832-9706;
and First Class U.S. Mail

Julie Cunningham
California Department of Fish and Game
Portola Field Office
P.O. Box 1858
Portola, CA 96122

**Re: Notice of Preparation of a Draft Environmental Impact Report for the Lake Davis
Pike Eradication Project**

Dear Ms. Cunningham:

The City of Portola ("Portola") appreciates the opportunity to provide comments and suggestions regarding the scope of the draft Environmental Impact Report/Environmental Impact Statement ("EIR/EIS") for the proposed Lake Davis Pike Eradication Project by the California Department of Fish and Game ("CDFG"). Portola participated in the scoping meetings in Portola as well as in Sacramento and has been actively involved in the Oversight Committee regarding CDFG's efforts to minimize the population of the northern pike at Lake Davis ("Lake"). Portola would like to continue participating in the EIR/EIS process and be fully informed during implementation of any project that CDFG decides to initiate. Accordingly, Portola is providing the following list of comments and suggestions regarding the scope of the EIR/EIS.

1. During the scoping meeting, it was acknowledged by the CDFG staff that the continued increase in population of northern pike at the Lake decreases tourism and thus the local tourist economy. However, during the meeting, it was not made clear that CDFG recognizes the impact of any eradication project on the local economy. Apparently CDFG has decided to prepare an economic analysis outside the scope of its California Environmental Quality Act ("CEQA") review. It is Portola's understanding that the economic analysis will be conducted independently but concurrently with the CEQA review. (See Initial Study, Attachment A, Project Description at p. 4). Portola believes that the CEQA review process should include the economic analysis and that the economic impacts of any eradication program must be mitigated.

Oregon
Washington
California
Utah
Idaho



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Also during this meeting, it became apparent that the U.S. Forest Service is likely to close a portion of the Plumas National Forest during implementation of the project. It is not clear, however, whether, pursuant to the National Environmental Policy Act ("NEPA"), the EIS will include a socioeconomic analysis as part of the feasibility study for the Federal action. As part of the NEPA review, a feasibility analysis which includes the socioeconomic impact of closing the forest should be conducted. Thus, under both NEPA and CEQA, the economic analysis of the Federal and State actions should be analyzed, impacts mitigated, and mitigation included in the EIR/EIS.

The initial study fails to consider the planned increase in permanent residency in Portola, although it does recognize the potential to impact tourism. The CEQA/NEPA analysis should evaluate the project's impacts on the long-term growth projections. This evaluation should include the potential social/economic impact to Portola in the event the anticipated growth is potentially impacted by the eradication project. The potential impacts include a long-term, no-growth pattern. For example, the stigma associated with this second attempt to eradicate the northern pike could result in a pull-out by developers on currently planned projects. Existing contractual obligations relating to certain development projects could be impacted by the proposed project because of the project's effect on the municipal water supply provided by Lake Davis.

2. The Initial Study states that the Plumas County Water Treatment Plant was taken offline prior to October 1997 as it did not meet regulatory standards. (See Initial Study, Attachment A, Project Description at p. 4). The Plumas County Water Treatment Plant, which treats the Lake water, did meet regulatory standards in October 1997. Contrary to the statement in the Initial Study, the Plant was not operated subsequent to the October 1997 chemical treatment because of the application of rotenone to the Lake and the continued presence of rotenone constituents in the Lake months after application. The ongoing water testing at the Lake by the Department of Health Services resulted in the determination of a chemical free Lake in 1999. As early as July, 2000, Portola began requesting the County to take the necessary steps to allow use of the Plumas County Water Treatment Plant. On February 13, 2002, Portola formally indicated its intent to go back to the Lake as its main water supply. Since that time, Portola and Plumas County have been working diligently to obtain funding to construct a water treatment plant that meets the current drinking water standards. Efforts have been made to obtain State and Federal grants and loans for the past several years. Plumas County and Portola have also engaged in a lengthy process to develop additional local funding for the water treatment plant. Currently, the County, with assistance from Portola, is finalizing the submittal of information for a State grant. As a result of the persistent efforts by Portola, the grant funds have been preliminarily awarded and a final approval of the grant award is expected in the near future. In the meantime, design of the plant is proceeding, and it is expected that the plant will be online by the close of 2006.



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In 1998, because the Lake could not be used as a safe potable water supply, CDFG provided Portola the funding for an alternate water supply that Portola accomplished by developing groundwater wells. However, this interim alternate water supply was never intended to be the permanent supply for Portola. Prudent engineering practices recommend a redundancy element in public water systems that call for an additional water source equal to or greater than the single largest resource producer in the event of a systems failure to one of the resources. Since the October 1997 treatment of the Lake, Portola has not been able to meet this prudent recommendation. Further, Portola's two domestic water supply wells have arsenic levels detected as high as 23 and 26 ppb, which exceed the new Federal standard of 10 ppb, effective in January, 2006. Wellhead treatment for arsenic will be required in order for Portola to continue to rely on these wells as an alternate water supply. In light of the fact that the Lake provides an adequate water supply that is more reliable than groundwater, Portola has been making every effort to go back to the Lake as its main domestic water supply. Based on the current schedule, Portola will return to the Lake as its main water supply in late 2006. Thus, the EIR/EIS should analyze the impact of the eradication project on Portola's domestic water supply.

The EIR/EIS analysis of the potential impact to Portola's domestic water supply should include the effect on Portola's General Plan and land use planning. Portola is experiencing growth as is other parts of California and is obligated to ensure adequate water supply for the long-term growth. CDFG's pike eradication project is likely to effect Portola's ability to rely on Lake Davis as its main water supply and thus could also impact long-term growth.

3. CDFG describes the proposed project as limited to one application of rotenone, and thus, it does not appear that CDFG is considering a second application to insure complete pike eradication. Given the history of the use of rotenone in the State of California and the potential of a second application to rid the Lake of the northern pike, it appears necessary to include this potential in the CEQA/NEPA analysis. The EIR/EIS should also describe CDFG's timing for an additional application of rotenone, if deemed necessary, and the environmental impact of retaining the Lake at a lower level for an extended period. This potential application of rotenone for a second time should also consider the economic impact of the loss of the trout fishery tourism and the impact to the municipal water supply during the likely extended period of a lower Lake level.

4. The project description proposes several project alternatives, each of which include a different Lake level. Under each of these scenarios, the CEQA/NEPA analysis should also include the time period under various hydrological scenarios for the refilling of the Lake to at least 40,000 acre-feet. Although CDFG cannot predict the exact timing for refill in each instance, historical records provide enough data for a reasonable determination of the timeframe during which the Lake will be below 40,000 acre-feet. Under each alternative and hydrological



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potential impacts to Grizzly Creek. Grizzly Creek could experience down cutting of sediments causing impacts on erosion and soils. Grizzly Creek runs into Feather River, and, thus erosion and increase in sediment could also affect Feather River. The impacts are likely to occur because of the increased flows into Grizzly Creek, necessary for reservoir drawdown and perhaps to keep the reservoir level low.

The Department of Water Resources is obligated to provide instream flow at Grizzly Creek of 10 cfs. Under the proposed project, will this instream flow requirement be impacted and, if so, for how long? In addition, the Grizzly Ranch development has been diverting water from Grizzly Creek. The proposed project's impact to the instream flow and the ongoing diversion should be analyzed.

9. The CDFG project description does not describe how CDFG will determine whether the project is successful. The criteria for success should be outlined in the EIR/EIS and include a determination of success for the tributaries to the Lake.

Once again, the City of Portola appreciates the opportunity to provide these comments regarding the scope of the environmental impact analysis for the CDFG Lake Davis Pike Eradication Project.

If you have any questions regarding this comment letter, please do not hesitate to contact the undersigned or Jim Murphy from the City of Portola.

Best regards,

Barbara A. Brenner

BB:jmw

cc: Portola City Council
Jim Murphy
Steven C. Gross

From: "Loane, John" <jloane@CIWMB.ca.gov>
To: <jcunningham@dfg.ca.gov>
Date: 9/27/2005 11:28:26 AM
Subject: Emailing: rotenone



<<rotenone.url>> I was just looking through my NOCs/NOPs and read about the proposal to eradicate the northern pike from the reservoir at Lake Davis. I was curious about the pesticide and wanted to know more about rotenone. My background before coming to the CIWMB to review environmental documents for CEQA compliance was cleaning up liquid toxic contamination from spills and tank leaks mostly (including the Exxon Valdez beach cleanup). I did cleanup laboratory feasibility studies for Groundwater Technology, Inc., using indigenous microorganisms and did a number of pesticide cleanup studies. I had not heard of rotenone so I did an internet search and got the following website. I saw that a recent study linked rotenone to Parkinson's disease and know from my CEQA experience here at the Board that this study might be used as 'substantial evidence of a potentially significant environmental effect' which may require 'overriding considerations'. I think you probably know about the cited study, but since it is "recent" so I thought I should forward it to you:

The message is ready to be sent with the following file or link attachments:

Shortcut to: <http://www.pan-uk.org/pestnews/Actives/rotenone.htm>

Note: To protect against computer viruses, e-mail programs may prevent sending or receiving certain types of file attachments. Check your e-mail security settings to determine how attachments are handled.


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Rotenone

A recent study linking rotenone - a pesticide with a 'natural' image, commonly used in organic farming and gardening - to Parkinson's disease, has increased demand for a level playing field in the safety assessment of pesticides. The current regulatory system, designed for synthetic agrochemicals, impedes research into, and registration of, least toxic, relatively benign pest control substances.

What is rotenone

Rotenone is a naturally occurring chemical with insecticidal, acaricidal(1) (mite and spider-killing) and piscicidal (fish-killing) properties, obtained from the roots of several tropical and subtropical plant species belonging to the genus *Lonchocarpus* or *Derris*. It is a selective, non-specific insecticide, used in home gardens for insect control, for lice and tick control on pets, and for fish eradications as part of water body management(2). Both a contact and stomach poison to insects, it kills them slowly, but causes them to stop their feeding almost immediately(3). It exerts its toxic action by acting as a general inhibitor of cellular respiration(4).

Production

Rotenoids, the rotenone-related materials, have been used as crop insecticides since 1848, when they were applied to plants to control leaf-eating caterpillars. However, they have been used for centuries (at least since 1649) in South America to paralyse fish, causing them to surface(5). *Derris* root has long been used as a fish poison and its insecticidal properties were known to the Chinese well before it was isolated by E. Geoffrey in 1895(6). The use of the ground root of certain species of *Derris* was patented in 1912, since when it has been established that the active compounds are rotenoids, of which the main insecticide is rotenone(7).

Rotenone is sold in dispersible powder, emulsifiable concentrate, and wettable powder formulations(8). In the UK, two professional products are registered: Devcol Liquid Derris, and Liquid Derris, and nine amateur products, including two wasp-killers. Another product marketed by pbi contains a mixture of rotenone and sulphur, both a fungicide and insecticide(9).

Products containing rotenone are registered in Denmark, Ireland, UK, France, Spain, Italy(10). One product for fisheries management is also approved in Sweden, for restricted use(11).

Use

In the UK, rotenone products are approved for use against aphids on flowers, ornamentals, protected crops, soft fruit, top fruit, and vegetables, and against sawflies on gooseberries, and slug sawflies in pears and roses(12).

Very little rotenone is used in commercial fruit and vegetable production in the UK. The average annual total - all crops - is just three kilograms, used to treat 93 hectares. Since 1983, the minimum area treated annually was 22 hectares in 1985/86, and the maximum was 165 hectares in 1991(13). No data is collected for amateur usage, and total stocks for amateur products (in garden sheds and amongst wholesalers and retailers) are likely to be considerably greater than for professional use.

Other target organisms of rotenone include maggots, bagworms, codling moths, Japanese beetles, leaf hoppers, Mexican bean beetles, cabbage worms, thrips, stinkbugs, flea beetles, and vegetable weevils(14).

The UK Environment Agency, responsible for granting licences for the use of noxious substances for the taking or destroying of fish, under the Salmon and Freshwater Fisheries Act 1975, and rotenone is by far the most common chemical used for this purpose(15).

Use of rotenone in organic production

In organic production, the use of rotenone is permitted as an insecticide under European Union Regulation 2092/91, amended by 1488/97, Annex II (B)(16). In response to a recent study linking rotenone to Parkinson's Disease(17), the UK Soil Association put a temporary ban on its use, pending further investigations.

Acute toxicity

Rotenone is classified by the World Health Organisation as a moderately hazardous, Class II(18). The LD50 for rats (the amount of the chemical lethal to one-half of experimental animals) is between 132 and 1,500 mg per kilogram(19). One factor in this wide variation may be the differences in the plant extracts used(20).

The acute oral toxicity of rotenone is moderate for mammals, but there is a wide variation between species(21). It is less toxic for the mouse and hamster than for the rat; the pig seems to be especially sensitive. Recent studies have shown that in rats, rotenone is more toxic for females than males. It is highly irritating to the skin in rabbits (22), and to the eyes. In rats and dogs exposed to rotenone in dust form, the inhalation fatal dose was uniformly smaller than the oral fatal dose(23).

Rotenone is believed to be moderately toxic to humans with an oral lethal dose estimated from 300 to 500 mg/kg(24). A lowest lethal dose of 143 mg/kg has been cited in a child(25). Clinical experience seems to indicate that children, in particular, are rather sensitive to the acute effects of rotenone(26).

Human fatalities are rare, perhaps because rotenone is usually sold in low concentrations (one to five per cent formulation), and because its irritating action causes prompt vomiting. If the dust particle size is very small, and can enter deep regions of the lungs, rotenone's toxicity when inhaled may be increased. Acute local effects include conjunctivitis, dermatitis, sore throat, congestion, and vomiting. Inhalation of high doses can cause increased respiration followed by depression and convulsions(27). On the basis of rabbit studies, absorption through the intact skin is low(28).

Chronic effects

Studies on dogs at high doses produced adverse changes in blood chemistry(29). In dogs fed rotenone at 10 mg/kg per day for six months, weight loss and haematological effects were found. A No Observed Adverse Effect Level (NOAEL) of 0.4 mg/kg per day has been determined for rats (2-year study), and dogs (16-month study)(30).

Cancer

Published studies on the carcinogenic potential of rotenone are conflicting and inconclusive. Significant increases in mammary tumours have been reported in albino rats with intraperitoneal doses of 1.7 mg/kg/day for 42 days. But no evidence of carcinogenic activity was seen in hamsters at oral doses as high as 120 mg/kg/day for a period of 18 months(31).

Endocrine-disrupting effects

Rotenone is not included on any existing lists as an endocrine-disrupting pesticide(32).

Reproductive effects

Reproductive effects seem unlikely in humans at expected exposures. Foetotoxicity and failure of offspring are reported in guinea pigs at doses of 4.5 and 9.0 mg/kg/day for an unspecified period(33).

Teratogenic effects

Evidence for this is inconclusive. In one study, pregnant rats fed 5 mg/kg/day produced a significant number of young with skeletal deformities(34).

Neurotoxicity

The recent study administered rotenone by continuous infusion into the jugular vein of rats at dose levels of 1 to 12 mg/kg/body weight per day. The aim of the work was to develop a model for Parkinson's disease, rather than study the toxicity of rotenone, and why this chemical was chosen is not clear. The optimal dose for producing Parkinson-like pathology was found to be 2 to 3 mg/kg/ body weight per day, clearly above the intravenous LD50(35).

A subsequent study, using much lower levels of chemicals, found that a combination of paraquat and maneb, but neither one alone, creates in mice the exact pattern of brain damage seen in Parkinson's disease patients, and that older mice may be more sensitive to the combination than younger mice(36).

Consumer and occupational exposure

Estimates of operator exposures to rotenone products have been calculated. The Occupational Exposure Standard in air for rotenone is 5 mg/m³ (8 hours), 10 mg/m³ (10 minutes). For 'talc' (dust) it is 10 mg/m³ (8 hours), respirable 1 mg/m³ (8 hours)(37).

Fate in the environment

Rotenone is rapidly broken down in soil and water: its half-life in both is between one and three days(38). Nearly all its toxicity is lost in five to six days of spring sunlight, or two to three days of summer sunlight. It does not readily leach from soil and it is not expected to be a groundwater pollutant(39).

Water

Rotenone is highly toxic to fish: most values for the 96 hour LC50 (lethal concentration required to kill half the test organisms) for different fish species and for daphnids (water fleas) lie in the range of 0.02 to 0.2 mg/litre. If used as a piscicide, it may also cause a temporary decrease in numbers of other aquatic organisms(40).

There is considerable controversy over the use of rotenone to kill non-game fish in water body management areas. One study found that the practice has a substantially harmful effect on biodiversity, in which several populations of the native fish showed negligible signs of recovering stocks, while populations of all exotic species are up(41).

Food residues

Rotenone is not included in regulatory food residue programmes, and therefore no data is available.

Data gaps

The data base supporting the approval of rotenone is not to current requirements. NOAELs have not been determined for repeated exposures, no information is available on the extent of studies on its effect on the brain, and there is insufficient data on genotoxicity.

Conclusion

PAN UK believes that the same precautionary principle should be applied to all pesticides, and that no substance, however long-term its use, should be assumed to be safe without scientific assessment. The problems evident for rotenone – insufficient usage data, inconclusive studies, concern about unknown synergistic activity with other substances, and potential health hazards, are consistent with problems found with the majority of registered agrochemicals. (AC)

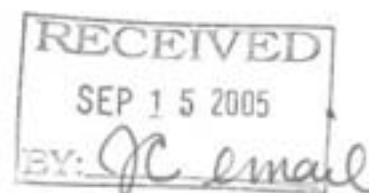
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[This article first appeared in Pesticides News No. 54, December 2001, pages 20-21]

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From: "Okamoto, Howard (DHS)" <HOkamoto@dhs.ca.gov>
To: "Cunningham, Julie@DFG" <JCUNNINGHAM@dfg.ca.gov>
Date: 9/15/2005 4:04:19 PM
Subject: RE: pike eradication proposal



Julie,

Thanks for the information. Please keep me informed of the progress of the eradication project and the final piscicide formulation to be used, including any additional solvents, emulsifiers, carriers, etc. that will be used in the application, if any, before the start of the eradication.

Howard S. Okamoto
Research Scientist Supervisor I
DHS-DDWEM
Sanitation and Radiation Lab
850 Marina Bay Parkway, G-164
Richmond, CA 94804
(510) 620-2942

-----Original Message-----

From: Julie Cunningham [mailto:jcunningham@dfg.ca.gov]
Sent: Tuesday, September 13, 2005 6:54 PM
To: darleneoertle@countyofplumas.com; Gladden, Jennifer (Plumas County); Sipe, Jerry (Plumas); kellyhale@countyofplumas.com; Ivan Paulsen; Lori Powers; Spath, Dave (DHS-DDWEM); Okamoto, Howard (DHS); Watson, Steve (DHS-DDWEM); cstanton@ephc.org; hintons3@pacbell.net; mglynn@pcoe.k12.ca.us; bwutlmgr@psln.com; cwadc@psln.com; lmarsh@psln.com; Dykstra, Ronald S@WRCB; bolesj@water.ca.gov; clevine@water.ca.gov; dougr@water.ca.gov; hintonr@water.ca.gov; kwhs3@yahoo.com
Subject: pike eradication proposal

People who attended Lk Davis water quality group:

I just wanted to let you know that tomorrow CDFG will be releasing a proposal for a pike eradication project. The proposal entails both a partial drawdown & the use of liquid rotenone. It also includes several alternatives, two of which involve the use of liquid rotenone, one that is a "no project" alternative, and also an alternative of completely dewatering the reservoir. These alternatives are just preliminary - others could be developed as an outcome of the public and agency scoping that we will be doing.

Formulations of rotenone (and perhaps others that we may become aware of) that we talked about in the water quality group would be analyzed and discussed in the draft EIR/EIS.

Tomorrow's announcement takes the form of a "Notice of Preparation" of a Draft Environmental Impact Report and also a "Notice of Intent" by the Plumas National Forest to prepare a draft Environmental Impact Statement for a use permit in support of our proposed project. We will actually be preparing a joint draft EIR/EIS with the Forest Service and will be hiring an environmental consultant to help us. We have prepared an Initial Study that takes a preliminary look at resources that could be affected by the proposed project, and which includes the project

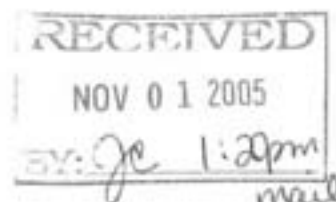


State of California—Health and Human Services Agency
Department of Health Services



ARNOLD SCHWARZENEGGER
Governor

October 28, 2005



Julie Cunningham
California Department of Fish and Game, Region 2
P.O. Box 1858
Portola, CA 96122

**RE: Comments Regarding Notice of Preparation for Lake Davis Pike
Eradication Project Draft Environmental Impact Report (EIR/EIS)**

The Department of Health Services (DHS) received the Notice of Preparation (NOP) for the above referenced project on September 30, 2005. We appreciate the opportunity to comment and recommend that the following be considered in preparation of the EIR/EIS:

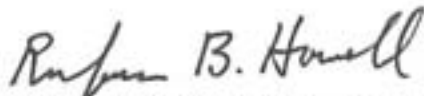
1. Currently, the Plumas County Environmental Health Department (County) administers a monitoring program to annually test approximately 80 wells in the vicinity of Lake Davis for chemicals associated with the treatment of the lake in 1997. The EIR/EIS should evaluate the County's monitoring program to determine if the results, to date, show any impact to the water quality of wells in vicinity of Lake Davis. The EIR/EIS should make recommendations for any additional groundwater water quality monitoring that may be necessary to evaluate potential impacts to adjoining wells as a result of the proposed project. If a project is selected, the DHS recommends extension of the County's monitoring program including baseline testing of the wells prior to treatment.
2. The EIR/EIS should evaluate the potential impact the draw down of Lake Davis will have on the recharge of groundwater supplies, as well as the impact on recharge from decreased flows in Big Grizzly Creek while Lake Davis is refilling after completion of the project.
3. The Plumas County Flood Control District is in the process of developing plans for construction of a new water treatment plant and resumption of Lake Davis as a drinking water supply, with a completion date as early as the fall of 2006. The

EIR/EIS should evaluate potential impacts of the project on the construction of the facilities and resumption of Lake Davis as a source of supply. As required by Health and Safety Code, Section 116751, an alternative supply of drinking water will need to be provided to the users of the Lake Davis water supply while the project takes place. The City of Portola and Grizzly Lake Resort Improvement District's plans for an alternative drinking water supply during the treatment process should be identified and evaluated in the report.

4. A monitoring program to ensure that no detectable residuals of the chemical, breakdown products, and other components of the formulation remain in the drinking water supply or adjoining wells following treatment will need to be established prior to the application. DHS recommends that the EIR/EIS consider the use of pilot scale testing as a means to evaluate persistence and degradation of the formulation's components and breakdown products in the environment, and to assist in the development of a monitoring program.
5. The components and breakdown products of the proposed rotenone formulations should be provided as part of the environmental review process. This information is needed in order for DHS to evaluate and comment on the potential short-term and long-term health risk levels of the constituents in drinking water, and the ability to monitor at these levels based on analytical detection limits.

Please contact Michael McNamara of my staff at (530) 224-8473 if you have any questions regarding these recommendations.

Sincerely



David P. Spath, Ph.D., P.E., Chief
Division of Drinking Water
and Environmental Management

cc: Central Valley Regional Water Quality Control Board
Plumas County Environmental Health Department
Steve Woods, Chief, Environmental Review Unit
Bob Hultquist, Chief, Northern Field Operations
Carl Lischeske, Chief, Northern California Section
Mike McNamara, Lassen District Engineer
Rufus Howell, Asst. Chief, Division of Drinking Water and Environmental Management

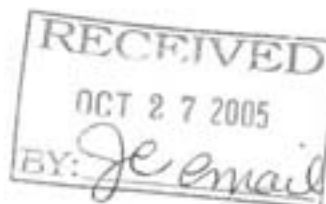
From: Marcelino Gonzalez <marcelino_gonzalez@dot.ca.gov>
To: <jcunningham@dfg.ca.gov>
Date: 10/25/2005 11:00:26 AM
Subject: Lake Davis Pike Eradication NOP EIR Response

Electronic copy of response. Hard copy to follow by regular mail.

(See attached file: Plu-70-78.73 DFG MEMO Pike NOP.doc)

Marcelino "Marci" Gonzalez
Local Development Review
(530) 225-3369
(530) 225-3020 FAX

CC: Sandy Porter <sandy_porter@dot.ca.gov>



9:45am

STATE OF CALIFORNIA
MEMORANDUM

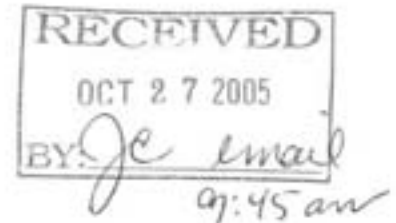
Business, Transportation and Housing Agency

To: Julie Cunningham
DEPT OF FISH AND GAME

Date: October 25, 2005

From: Marcelino Gonzalez, Intergovernmental Review
DEPARTMENT OF TRANSPORTATION – District 2

Subject: Lake Davis Pike Eradication Project NOP EIR
Plu-70-78.73
SCH# 2005092070



Caltrans District 2 has reviewed the Notice of Preparation of an Environmental Impact Report (NOP EIR) submitted on behalf of the California Department of Fish and Game, for the Pike Eradication Project. The project is located at Lake Davis is Plumas County.

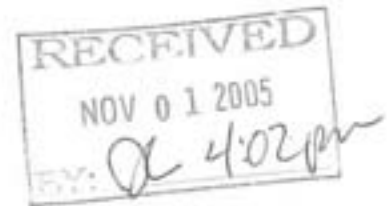
Caltrans has two State facilities of potential concern in this area. The Davis Safety Road Side Rest Area is located approximately one-half mile east of Grizzly Creek. The sites water source is a well. A similar past project did not have adverse effects on nearby water quality.

The second facility is the Grizzly Creek Bridge on State Route 70. We look forward to reviewing the project information related to proposed drawdown flows to address that adverse impacts on the bridge structure will not occur.

Similarly, when drawdown flows occur, if warning signs on the highway are proposed to advise of the increased flows, a Caltrans encroachment permit is required. For more information regarding encroachment permit fees or the encroachment permit process, please contact the District 2 Permits Office located at 1657 Riverside Drive in Redding. The telephone number is (530) 225-3400. Encroachment permit applications are also available from the Caltrans website at www.dot.ca.gov.

Thank you for the opportunity to provide comments on the NOP EIR. We look forward to receiving and reviewing the DEIR. If you have any questions, please call me at (530) 225-3369.

From: Michael J Friend <mjfriend@fs.fed.us>
To: <northernpike@dfg.ca.gov>
Date: 10/31/2005 12:20:52 PM
Subject: Botanical Resources

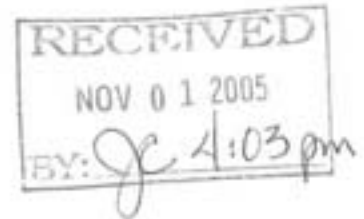


Hello Julie,

I happened to be reading the Pike Eradication Project Description on the website. I noticed that Botrychium is called a moss and Pyrocoma is referred to as a fern. This looks like an error during cutting and pasting. You're probably aware that Botrychium is a fern, and Pyrocoma lucida is a flowering plant. I'm referring to page 9, section IV. I hope this is helpful to you.

Mike Friend
Botanist
Beckwourth Ranger District
P.O. Box 7
Blairsdan, CA 96103
530-836-7167
Fax: 530-836-0493
mjfriend@fs.fed.us

From: <glrid@earthlink.net>
To: "Pike Team" <northernpike@dfg.ca.gov>
Date: 10/31/2005 4:08:15 PM
Subject: Public Comment on Pike Eradication Plan



Citizen: Sueann Duncan
Email: glrid@earthlink.net
Organization: Grizzly Lake Resort Improvement District
Address:
119 Delleker Rd

Portola, CA 96122

Home Phone: 530-836-0768
Bus. Phone: 530-832-5225
Mobile:
Fax: 530-832-1319

add to mailing list

Comment:

Dear Sirs:

Grizzly Lake Resort Improvement District is concerned about you poisoning Lake Davis again. In 2003 an Ordinance 03-Crocker Mt-001 was sent to Banky Curtis, 1701 Nimbus Road, Rancho Cordova, Ca 95670 stating before the poisoning, drained or other wise made unusable as a domestic water source for the District residents of Crocker Mt and Grizzly Retreat that the scheduler of poisoning, draining or other wise maker of unusable domestic water shall provide to the District before any action is taken: a Commercial Well complete and connected to a 200,000 Gallon Water Storage Tank ready for use by the customers of Crocker Mt and Grizzly Retreat. The District has already installed a 200,000 Gallon Water Storage Tank and expects you to pay for the cost of drilling a commercial Well for its residents. Grizzly Lake Resort Improvement District has waited since 1997 to return to Lake Davis water and the time has come for you, the Department of fish and game to stop the poisoning of Lake Davis and allow the residents of Crocker Mt and Grizzly Retreat to return to lake water or Drill the District a commercial Well. You can contact the District by calling 530-832-5225 Monday through Friday between 8:am and 4:30pm or fax the district at the number listed below. Thank you Sueann Duncan

STATE OF CALIFORNIA

Arnold Schwarzenegger, Governor

NATIVE AMERICAN HERITAGE COMMISSION

915 CAPITOL MALL, ROOM 364
SACRAMENTO, CA 95814
(916) 653-4038
Fax (916) 657-0800

September 21, 2005

Janis Offerman
Department of Water Resources
1725 23rd Street
Sacramento, CA 95816

RE: Plumas County Project

SENT VIA FAX: 916-657-5390

of Pages: 3

Post-It™ brand fax transmittal memo 7671		# of pages > 3
To Julie Cunningham	From Janis Offerman	
Co.	Co. DWIR	
Dept.	Phone # 916 445 6478	
Fax # 530 832 9706	Fax #	

Dear Ms. Offerman:

I recommend that you contact the Native Americans contacts on the attached list for the above mentioned project. They may be able to provide input concerning the project site and assist in the mitigation measures. It is with the understanding that the list is to be used only to determine possible areas of cultural sensitivity.

The Commission makes no recommendation or preference of a single individual, or group over another. This list should provide a starting place in locating areas of potential adverse impact within the proposed project area. I suggest that all of those indicated be contacted, if they cannot supply information, they may recommend others with specific knowledge. A minimum of two weeks must be allowed for responses after notification.

If you receive notification of change of addresses and phone numbers from any these individuals or groups, please notify me. With your assistance we are able to assure that our lists contain current information. If you have any questions or need additional information, please contact me at (916) 653-4038.

Sincerely,



Debbie Pitas-Treadway
Environmental Specialist III

**Native American Contacts
Plumas County
September 20, 2005**

Beverly Ogle
29855 Plum Creek Road
Paynes Creek, CA 96075
(530) 597-2070

Maidu

Maidu Cultural and Development Group
Lorena Gorbet
PO Box 426
Greenville, CA 95947
(530) 284-1601

Maidu

Enterprise Rancheria of Maidu Indians
Frank Watson, Vice Chairperson
1940 Feather River Blvd., Suite B
Oroville, CA 95965
eranch@cncnet.com
(530) 532-9214
(530) 532-1768 FAX

Maidu

Maidu Nation
Clara LeCompte
P.O. Box 204
Susanville, CA 96130
(530) 257-9691

Maidu

Enterprise Rancheria of Maidu Indians
Glenda Nelson, Chairperson
1940 Feather River Blvd., Suite B
Oroville, CA 95965
eranch@cncnet.com
(530) 532-9214
(530) 532-1768 FAX

Maidu

Plumas County Indians, Inc.
Tommy Merino, Chairperson
Box 102
Taylorville, CA 95983
(530) 284-6427

Maidu

Greenville Rancheria of Maidu Indians
Lorie Jaimes, Chairperson
PO Box 279
Greenville, CA 95947
(530) 284-7990
(530) 284-6612 - Fax

Maidu

Susanville Indian Rancheria
Stacy Dixon, Chairperson
745 Joaquin Street
Susanville, CA 96130
sirt@thegrid.net
(530) 257-6264
(530) 251-5635 Fax

Paiute
Maidu
Pit River
Washoe

Greenville Rancheria of Maidu Indians
Mike DeSpain, EPA/Cultural Resources
PO Box 279
Greenville, CA 95947
mdespain.
(530) 284-7990
Fax: (530) 284-6612

Maidu

Susanville Indian Rancheria
Melany Johnson, Cultural Resources Technician
745 Joaquin Street
Susanville, CA 96130
cultural@siir-nsn.gov
(530) 251-5636
(530) 251-5635 Fax

Paiute
Maidu
Pit River
Washoe

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7023.5 of the Health and Safety Code, Section 6097.94 of the Public Resources Code and Section 6097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resource assessment for the proposed project, Plumas County.

**Native American Contacts
Plumas County
September 20, 2005**

T'Si-akim Maidu
Ellen Moon, Vice Chairperson
152 Mill Street, Suite A
Grass Valley, CA 95945
(530) 274-3599

Maidu

Tasmam Koyom
Fred Mankins, President
PO Box 363
Gerber, CA 96035
(530) 385-1883

Maidu

Washoe Tribe of Nevada and California
Brian Wallace, Chairperson
919 Highway 395 South
Gardnerville, NV 89410
abw@washoetribe.us
775-265-4191
775-265-6240 Fax

Washoe

Washoe Tribe of Nevada and California
William Dancing Feather, Washoe Archive & Cultural Ctr
861 Crescent Drive
Carson City, NV 89701
(775) 888-0936
(775) 888-0937 FAX

Washoe

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7060.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.95 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resource assessment for the proposed project, Plumas County.

From: Julie Cunningham
To: Fish, Joe
Date: 10/17/2005 9:52:18 AM
Subject: Re: Lake Davis Pike Poisoning

Hi Joe:

Thank you for the update. I personally am not aware of information regarding your inquiry about naphthalene application to a cool mountain lake, but we will be working with you in the future on this and other questions you may need to answer.

I will get in touch with you regarding your issues regarding workload & timeline.

If he has not done so already, George should contact Bill Powers, Lake Davis Steering Committee Chair, to be placed on the email list for Steering Committee meeting notifications. Bill's email is: bill4supervisor1@yahoo.com

Thanks,

Julie

Julie Cunningham
Environmental Scientist
Calif. Dept. Fish & Game - Portola Field Office
P.O. Box 1858
209 Commercial Street
Portola, CA 96122
(530) 832-4069
FAX (530) 832-9706

>>> Joe Fish <joe@myairdistrict.com> 10/17/05 9:28 AM >>>
Hey Julie:

We are reviewing your NOP right now and will be making some comments. I have a small bit of bad news. We believe Naphthalene has been classified as a Toxic Air Contaminant. When I made my comments to you last July I was unaware that Naphthalene had been put on the toxic list back in August of 2004. Bummer! (My list was out-of-date. I hate when that happens.)

At the very least we will probably request all rotenone application be subsurface injection. Additionally, we will have to figure out what the potential risks are to the surrounding residents. Do you have any info on what happens to the naphthalene when it is applied to a cool mountain lake? We are going to have a lot of questions.

The answers to our questions will take some time, perhaps even months with our current workload.

Nevertheless, contrary to my previous correspondence, the Air District now has a much higher level of concern regarding the application of rotenone to Lake Davis.

Our Air Pollution Control Specialist George Ozanich will be attending the Lake Davis Steering Committee meetings as our representative as often as

possible.

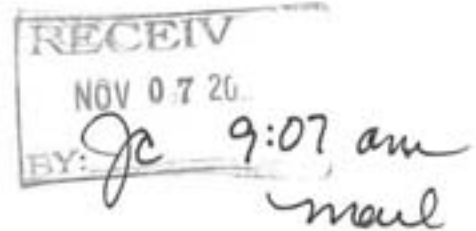
We'll be in touch,

Joe Fish
Deputy Air Pollution Control Officer
Northern Sierra Air Quality Management District, www.myairedistrict.com
(530) 274-9360, ext 103
joe@myairedistrict.com

CC: Lakedavis-adminrec@delta.dfg.ca.gov

October 31, 2005

California Department of Fish and Game,
Portola Field Office
Attn: Julie Cunningham
PO Box 1858
Portola, CA 96122



Re: Lake Davis Pike Eradication Project
Notice of Preparation of a Draft Environmental Impact Report

Dear Ms. Cunningham:

The Northern Sierra Air Quality Management District (District) has reviewed the Notice of Preparation (NOP) of a Draft Environmental Impact Report (DEIR) by the California Department of Fish and Game (DFG), accompanied by an Initial Study, for the proposed Lake Davis Pike Eradication Project, and has the following comments.

Since many important details of the project have not yet been established, the District may have additional comments or requirements at a later date. Mitigations for airborne toxics must be adequate to prevent short-term and long-term public health impacts, and it may be necessary to temporarily relocate nearby residents. Also, depending on the details of the Project, the District may require air monitoring to establish the concentrations of air pollutants in the proximity of receptors. In addition, depending on the alternative and method chosen, permitting or evaluation procedures may need to be followed regarding local, State and federal toxics regulations or other regulations. Accordingly, an Authority to Construct permit may possibly be required from the District. The District needs more information before making these crucial determinations. Close coordination with the District is highly recommended.

The Air Quality section of the NOP states that during the 1997 Pike Eradication project, there were 71 reports from citizens experiencing symptoms of illness. The District performed an investigation at that time and issued a Notice of Violation to DFG, along with a \$15,000 penalty. During the currently proposed project, it is extremely important to follow all protocols and plans relating to air quality and to avoid causing human health impacts. If such impacts occur under the proposed project, the District will likely issue another Notice of Violation with penalty.

The District would like to see a detailed map (or maps) of all areas to be treated. This map (or these maps) should include all residences, businesses and schools within two miles of any waters treated or potentially impacted by the project, including the drainage route all the way to Portola.

The NOP identifies an evaluation of options published in May, 2004 and mentions the use of rotenone powder. However, the Preferred Alternative in the project description does not mention rotenone powder. If powder is to be used, that should be clearly stated in the DEIR.

Section 1.6.1 of the project description states, for the Preferred Alternative, "It is anticipated at this time that the concentration of rotenone formulation used would be 2 ppm." The meaning of this statement is not clear. It could refer to the concentration of rotenone in the formulation or the concentration of the formulation in the water. Also, when discussing liquids of different densities, it is important in stating ppm to clarify if it is ppm by volume or ppm by weight, and to give the temperature at which the stated relationship holds true. Another important figure to convey would be the desired concentration of rotenone in the water, based on the susceptibility of pike to fatal doses of rotenone.

The District recommends that all available, potentially usable rotenone formulations be considered and evaluated in the DEIR with respect to air pollution potential. The presence, quantities and toxicity of any federally listed Hazardous Air Pollutant (HAP), any State-listed Toxic Air Contaminant (TAC), and any known or suspected human carcinogen should be made very clear in the DEIR. A toxic risk analysis (using the most recent OEHHA toxicity information for acute, chronic and carcinogenic effects) should be performed for any formulation used, based on the most detailed product information available. In particular, the District would like to see an analysis of public exposure potential which addresses the following conditions and factors under a reasonable worst-case scenario:

1. Potential maximum concentrations at the nearest residential property boundary, assuming a worst-case scenario in which there is a strong, low temperature inversion and winds carrying airborne toxics directly toward the residence.
2. The rate at which any toxics would become airborne from the Lake and the waters entering and exiting the Lake, along with any ponds, wetlands or other areas treated and any surface areas inadvertently treated.
3. The influence of factors such as water temperature, density, surface air movement, volatility, solubility, natural decomposition of the formulation(s) in the environment over time, the geometry of the airshed, wind direction, time of day, cloud cover, humidity, and various other weather conditions.
4. The behavior of the associated toxic and odorous chemicals in both water and air considering water's chemistry and temperature.

All relevant calculations should be included in the DEIR, and any assumptions made obvious. Any ppm or percentage figures used in the calculations should specify if they are by weight or by volume.

The Rotenone Application section mentions spraying liquid rotenone by helicopter. The DEIR should give thorough detail on how this is to be accomplished, and potential emissions from this action should also be quantified and analyzed. The potential for the helicopter blades and associated air movement, combined with normal winds, to disperse the formulation to undesirable destinations should also be discussed. Likewise, the potential for the formulation to become airborne through the other application methods mentioned (drip stations, hand-type spray-bottles, hand-type

sprayers, backpack sprayers, other similar devices, and ATV-mounted sprayers) should be addressed and analyzed in the risk analyses.

The District recommends that any chemical treatment involving (or resulting in the formation of) a TAC, HAP or known human carcinogen be performed during a period of good atmospheric dispersion characteristics, such as a several-day low pressure system.

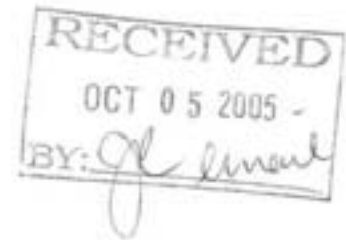
Please call me at (530) 274-9360 should you have any questions or comments.

Sincerely,

A handwritten signature in dark ink, appearing to read 'Sam Longmire', with a long, sweeping horizontal line extending to the right.

Samuel F. Longmire
Air Pollution Control Specialist

From: "Anna Fan" <afan@oehha.ca.gov>
To: <jcunningham@dfg.ca.gov>
Date: 10/5/2005 8:25:56 PM
Subject: draft EIR for a Lake Davis pike eradication project



Hi, Julie,

Yes. This is what I am referring to. (I just noticed i mistakenly switched to my other e-mail address earlier. Pl use this one.)

We'll go to the web. But hard copies are easier to handle. Pl send 2 copies. Thanks. The address is:

Bob Brodberg
Office of Environmental Health Hazard Assessment
Pesticide and Environmental Toxicology Section
1001 I Street
Sacramento, CA 95814

Cc: <LakeDavis-adminrec.PO_CVBDB.DOM_CVBDB@dfg.ca.gov>
Sent: Wednesday, October 05, 2005 2:46 PM
Subject: Re: Lake Davis EIR

Hi Anna:

Are you referring to our Notice of Preparation to prepare a draft EIR for a Lake Davis pike eradication project? If you'll send me the address I'll be happy to send 2 copies of that & the initial study. They are also available on web at www.dfg.ca.gov/northernpike.

Julie

Julie Cunningham
Environmental Scientist
Calif. Dept. Fish & Game - Portola Field Office
P.O. Box 1858
209 Commercial Street
Portola, CA 96122
(530) 832-4069
FAX (530) 832-9706

>>> "Anna Fan" <amfan@sbcglobal.net> 10/05/05 2:31 PM >>>
Hi, Julie,

I received this draft EIR at my Oakland office. But since I have staff in the Sacramento office who I would be asking to review this, can u please send two copies to our Sacramento address (I'll followup and send you)? Thanks.

Its 1001 I Street
Sacramento, CA 95814
or
P.O. Box 4010
Sacramento, CA 95812

Office of Environmental Health Hazard Assessment



Alan C. Lloyd, Ph.D.
Agency Secretary

Joan E. Denton, Ph.D., Director
Headquarters • 1001 I Street • Sacramento, California 95814
Mailing Address: P.O. Box 4010 • Sacramento, California 95812-4010
Oakland Office • Mailing Address: 1515 Clay Street, 16th Floor • Oakland, California 94612



Arnold Schwarzenegger
Governor

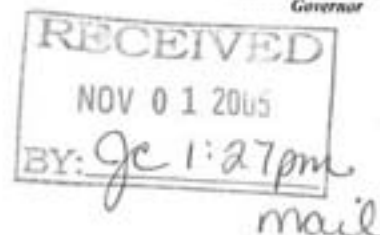
MEMORANDUM

TO: Ms. Julie Cunningham
California Department of Fish and Game
Portola Field Office
P.O. Box 1858
Portola, California 96122

FROM: Anna M. Fan, Ph.D., Chief
Pesticide and Environmental Toxicology Branch
1515 Clay Street, 16th Floor
Oakland, California 94612

DATE: October 26, 2005

SUBJECT: DRAFT ENVIRONMENTAL IMPACT REPORT/ENVIRONMENTAL
IMPACT STATEMENT (EIR/EIS) FOR THE LAKE DAVIS PIKE
ERADICATION PROJECT.



Thank you for the opportunity to assist the Department of Fish and Game (DFG) in identifying issues and concerns of the Office of Environmental Health Hazard Assessment that should be covered in the planned Draft Environmental Impact Report/Environmental Impact Statement (EIR/EIS) for the Lake Davis Pike Eradication Project. We have the following suggestions for the report and implementation planning arranged by topic:

Toxicology

We recommend incorporation of the most recent toxicology information for the active ingredients Rotenone and piperonyl butoxide from US EPA's most recent risk assessment evaluation. These can be found at:

Rotenone:

<http://www.epa.gov/iris/subst/0344.htm>

Piperonyl butoxide:

<http://docket.epa.gov/edkpub/do/EDKStaffCollectionDetailView?objectId=0b0007d4805d36b9>

California Environmental Protection Agency

The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption.



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We recommend utilizing information in these two documents above to inform the residents living around Lake Davis concerning possible acute and or chronic health outcomes from exposure. Additionally, the EIR/EIS should address the toxicology of any inert ingredients of the product used, including petroleum distillates, surfactants, etc. This should be placed in the context of the exposure discussion that follows. Finally, the EIR/EIS document should include a discussion regarding the environmental fate in air and water of the applied products.

Exposure

Inhalation

During the last treatment of Lake Davis air monitoring occurred post application. We recommend that the results of this monitoring be discussed in the EIR/EIS and that implementation plans should include air monitoring by the Air Resources Board before, during, and after future application of the two products. Active ingredients and volatile adjuvants should be monitored.

During the last treatment of Lake Davis, the Department of Pesticide Regulation evaluated the adverse health outcomes experienced by the residents. These evaluations are summarized in a Department of Pesticide Regulation the Health and Safety Report, HS 1772 (<http://www.cdpr.ca.gov/docs/whs/pdf/hs1772.pdf>). We recommend that the results of this report be discussed in the EIR/EIS and considered in implementation plans.

We recommend planning to establish a health-effects hotline for residents to call should they experience respiratory discomfort or other symptoms during applications. This hotline should be established before applications begin. Local physicians should be advised that suspected or known pesticide illnesses are reportable to the local health officer within 24 hours. Local health officers are required to notify the county agricultural commissioner, the Office of Environmental Health Hazard Assessment, and the Department of Pesticide Regulation. OEHHA has the official forms for local health officer for reporting of suspected or known illnesses and these can be obtained at http://www.oehha.ca.gov/pesticides/pdf/PIR_99.pdf or by contacting Mr. Robert Schlag at (916) 323-2624.

Drinking water

The degradation rates in water and sediment of active ingredients in the product to be used for eradication should be discussed in the EIR/EIS. These should be discussed in relation to monitoring results from the prior application and model expectation prior to that application.

Plans should be included for water sampling prior, during, and after application to determine the degradation rates of the active ingredients in the lake and sediments. Chemical analysis

should include both active ingredients and other product components, including breakdown materials.

Contamination of private or wells adjacent to the lake from recharge with lake water during or after application should be considered and discussed. And plans should be included to sample water at the wellhead or in the finished tap water before, during, and after application to assess the presence of the active ingredients used in the eradication program.

Fish Consumption

We recommend characterizing the potential for bioconcentration and bioaccumulation of active ingredients in surviving fish or reintroduced fish as part of a risk assessment of consumption exposure from a partial draw-down scenario or as a result of failure to deactivate formulation ingredients downstream in Big Grizzly Creek.

Risk Assessment

A tiered risk assessment should be developed based on the exposure and toxicology information from the above pathways and compilation of data from the first applications (exposure) and the new toxicology information that has been summarized by the US EPA for the active ingredients. If the first tier of risk assessment indicates there is some hazard or risk, then a more detailed risk assessment should be done. The risk assessment should include the active ingredients and volatile adjuvants in the formulation to be used.

Risk Communication

We recommend that DFG establish good communication and coordination with the public, county health and environmental agencies (including the Health Officer and the Environmental Health Director), public and private water agencies, and state and federal agencies before, during and after the project.

Should you have questions on this evaluation please contact me at (510) 622-3165, Dr. Robert Brodberg at (916) 323-4763 or Dr. James Sanborn at (916) 323-2153. We look forward to working with DFG again in the future on public health issues.

cc: See next page

Ms. Julie Cunningham
October 26, 2005
Page 4

Val F. Siebal
Chief Deputy Director
Office of Environmental Health Hazard Assessment
P.O. Box 4010
Sacramento, California 95812-4010

George V. Alexeeff, Ph. D., D.A.B.T.
Deputy Director for Scientific Affairs
Office of Environmental Health Hazard Assessment
1515 Clay Street, 16th Floor
Oakland, California 94612

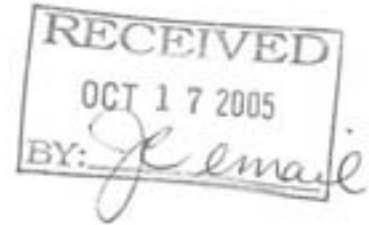
Robert K. Brodberg, Ph.D., Chief
Water Quality and Fish Evaluation Section
Pesticide and Environmental Toxicology Branch
Office of Environmental Health Hazard Assessment
P.O. Box 4010
Sacramento, California 95812-4010

James R. Sanborn, Ph.D.
Pesticide and Environmental Toxicology Branch
Office of Environmental Health Hazard Assessment
P.O. Box 4010
Sacramento, California 95812-4010

Robert Schlag, MS, Chief
Pesticide Epidemiology Section
Pesticide and Environmental Toxicology Branch
Office of Environmental Health Hazard Assessment
P.O. Box 4010
Sacramento, California 95812-4010

David Rice, Ph.D.
Pesticide and Environmental Toxicology Branch
Office of Environmental Health Hazard Assessment
P.O. Box 4010
Sacramento, California 95812-4010

From: "James Sanborn" <JSANBORN@oehha.ca.gov>
To: <jcunningham@dfg.ca.gov>
Date: 10/17/2005 3:28:59 PM
Subject: Lake Davis Pike Program



Julie:

I am going to be a part of the development of some comments for the Lake Davis Pike eradication program. Is it expected that the same two formulations will be used, Pro-Noxfish and Nusyn-Noxfish for the program?

Thanks, Jim

James R. Sanborn
Staff Toxicologist
Office of Environmental Health Hazard Assessment
(916) 323-2153
(916) 327-7320 Fax
email: Jsanborn@OEHHA.CA.gov

Street Address:
California EPA Building
12th Floor Cube 12-55C
1001 I Street
Sacramento CA

Mailing Address:
OEHHA
PETS
P.O. Box 4010
Sacramento, CA 95812-4010

From: Julie Cunningham
To: Sanborn, James
Date: 10/21/2005 3:19:23 PM
Subject: Re: Lake Davis Pike Program

Hi Jim,

Specific formulations have not been proposed for the project. Our draft project description and current draft alternatives (which may change as a result of the scoping process) call for simply a liquid formulation. This would exclude Pro-Noxfish, which I believe is a powdered form of rotenone. However, as I mentioned, the exact alternatives to be analyzed have not yet been developed & potentially could include a powdered form, I suppose.

Nusyn-Noxfish was a synergized formulation. That is, it included 2.5% rotenone, and 2.5% piperonyl butoxide, rather than being strictly 5% rotenone. Our draft description and draft alternatives do not address the issue of a synergized vs. nonsynergized formulation. Again, the alternatives which will be analyzed in the draft EIR/EIS have not been developed.

One of the largest rotenone manufacturers, Prentiss, has both Prenfish and CFT Legumine on the market, both liquid formulations. I'm faxxing you the Prentiss news release on CFT Legumine & think you can find information on Prenfish on their website. Of course I would be happy to supply you with that information if you'd like - let me know.

Will you be drafting scoping comments for OEHHHA?

Please include any issues that you are interested in exploring further in those written comments.

Please feel free to give me a call or email if you would like further information or would like to discuss these issues more.

Thanks,

Julie

Julie Cunningham
Environmental Scientist
Calif. Dept. Fish & Game - Portola Field Office
P.O. Box 1858
209 Commercial Street
Portola, CA 96122
(530) 832-4069
FAX (530) 832-9706

>>> "James Sanborn" <JSANBORN@oehha.ca.gov> 10/17/2005 3:28 PM >>>
Julie:

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Thanks, Jim

James R. Sanborn
Staff Toxicologist

Office of Environmental Health Hazard Assessment
(916) 323-2153
(916) 327-7320 Fax
email: jsanborn@OEHHA.CA.gov

Street Address:
California EPA Building
12th Floor Cube 12-55C
1001 I Street
Sacramento CA

Mailing Address:
OEHHA
PETS
P.O. Box 4010
Sacramento, CA 95812-4010

CC: bbrodberg@oehha.ca.gov; Coupe, Stephanie; Fan, Anna;
fwernette@delta.dfg.ca.gov; Lakedavis-adminrec@delta.dfg.ca.gov

Fax

To: James Sanborn
Organization: OEHHA

Fax: (916) 327-7320

Phone:

From: Julie Cunningham
California Department of Fish and Game
Portola Field Office
P.O. Box 1858
Portola, CA 96122
(530) 832-4069
FAX (530) 832-9706
jcunningham@dfg.ca.gov

Date: 9/10-21-05

Subject: rotenone formulations

Pages: 2

Comments: Here is the info. on CFT Legumine .



PRENTISS INCORPORATED

C.B. 2000 FLORAL PARK, N.Y. 11001

STREET ADDRESS: 21 VERNON ST., FLORAL PARK, NEW YORK

TEL. (516) 326-1919
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CFT Legumine™

In association with CWE Properties

We are pleased to announce the registration of a new liquid 5% rotenone formulation, CFT Legumine™. Although new to the United States, CFT Legumine™ has been used in Europe for fish management for over a decade. The country of Norway uses CFT Legumine™ to treat large rivers for eradicating the ectoparasite *Gyrodactylus salaris* on Atlantic salmon *Salmo salar* smolts. In comparison to conventional rotenone formulations on the market today, CFT Legumine™ has several advantages, including a special emulsifier and solvent package that reduces the presence of petroleum hydrocarbon solvents. The petroleum hydrocarbon solvents that are present in conventional rotenone formulations have strong chemical odors, and often there are applicator, public health and water quality concerns that affect the public's acceptance of rotenone. CFT Legumine™ was designed with the goal of reducing or eliminating petroleum hydrocarbon solvents such as toluene, xylene, benzene and naphthalene. By reducing these petroleum solvents, we have been able to reduce many of the negative properties inherent with the conventional liquid formulations on the market today. CFT Legumine™ is virtually odor-free, and retains its efficacy without the use of any synergist.

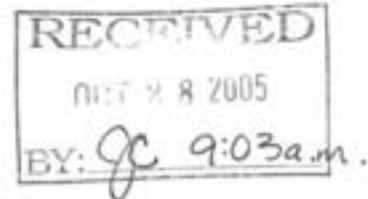
In laboratory trials conducted by the California Department of Fish and Game in 2002, CFT Legumine™ had essentially identical efficacy to the conventional liquid 5% rotenone formulation on rainbow trout fry at concentrations ranging from 0.25 to 2.0 ppm formulation. The California Department of Fish and Game in 2003 has used CFT Legumine™ to treat ponds to eradicate common carp (*Cyprinus carpio*), brown bullhead (*Americanus nebulosus*), largemouth bass (*Micropterus salmoides*), channel catfish (*Americanus punctatus*), goldfish (*Carassius auratus*), bluegill (*Lepomis macrochirus*), and grass carp (*Ctenopharyngodon idellus*). The California Department of Fish and Game also plans to use CFT Legumine™ in stream treatments for the restoration of native cutthroat trout.

Our representative, Ruth Fisher, will be at the American Fisheries Society (AFS) and Trade Show in Anchorage, Alaska to answer any questions you may have. As always, please feel free to call Ruth at 212/724-1438 or e-mail ruth.fisher@prentiss.com.

If you are interested in this product, please let us know so that we can be prepared with the proper inventory, package size, and various state registrations.

We look forward to working with you on this exciting new product.

From: "James Sanborn" <JSANBORN@oehha.ca.gov>
To: <jcunningham@dfg.ca.gov>
Date: 10/24/2005 6:38:05 AM
Subject: Re: Lake Davis Pike Program



Julie:

Thanks for the information and the FAX...One of the formulations used last time, Pro-Noxfish seems to have an inactive status at the Department of Pesticide Regulation. I will make you a PDF of the one page report from the Department of Pesticide regulation and send this morning.

Will you be drafting scoping comments for OEHHHA?: I do not know if the comments could be termed scoping comments but we will have some comments for you by the time you requested, hopefully by Oct. 31...they are moving up through the system here.

I will let you know if I have further questions. Thanks for the information you sent to Bob on a CD...I will open and read soon.

Based on your signature box at the bottom of your email...looks like you work in a very nice environment...Once I have been to Lake Almanor, a wonderful place!.....at least in the summer!!

Jim

James R. Sanborn
Staff Toxicologist
Office of Environmental Health Hazard Assessment
(916) 323-2153
(916) 327-7320 Fax
email: Jsanborn@OEHHHA.CA.gov

Street Address:
California EPA Building
12th Floor Cube 12-55C
1001 I Street
Sacramento CA

Mailing Address:
OEHHHA
PETS
P.O. Box 4010
Sacramento, CA 95812-4010

>>> Julie Cunningham 10/21/2005 3:19 PM >>>
Hi Jim,

Specific formulations have not been proposed for the project. Our draft project description and current draft alternatives (which may change as a result of the scoping process) call for simply a liquid formulation. This would exclude Pro-Noxfish, which I believe is a powdered form of rotenone. However, as I mentioned, the exact alternatives to be analyzed have not yet been developed & potentially could include a powdered form, I suppose.

Nusyn-Noxfish was a synergized formulation. That is, it included 2.5% rotenone, and 2.5% piperonyl butoxide, rather than being strictly 5% rotenone. Our draft description and draft alternatives do not address the issue of a synergized vs. nonsynergized formulation. Again, the alternatives which will be

analyzed in the draft EIR/EIS have not been developed.

One of the largest rotenone manufacturers, Prentiss, has both Prenfish and CFT Legumine on the market, both liquid formulations. I'm faxxing you the Prentiss news release on CFT Legumine & think you can find information on Prenfish on their website. Of course I would be happy to supply you with that information if you 'd like - let me know.

Will you be drafting scoping comments for OEHHA?

Please include any issues that you are interested in exploring further in those written comments.

Please feel free to give me a call or email if you would like further information or would like to discuss these issues more.

Thanks,

Julie

Julie Cunningham
Environmental Scientist
Calif. Dept. Fish & Game - Portola Field Office
P.O. Box 1858
209 Commercial Street
Portola, CA 96122
(530) 832-4069
FAX (530) 832-9706

>>> "James Sanborn" <JSANBORN@oehha.ca.gov> 10/17/2005 3:28 PM >>>
Julie:

I am going to be a part of the development of some comments for the Lake Davis Pike eradication program. Is it expected that the same two formulations will be used, Pro-Noxfish and Nusyn-Noxfish for the program?

Thanks, Jim

James R. Sanborn
Staff Toxicologist
Office of Environmental Health Hazard Assessment
(916) 323-2153
(916) 327-7320 Fax
email: Jsanborn@OEHHA.CA.gov

Street Address:
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12th Floor Cube 12-55C
1001 I Street
Sacramento CA

Mailing Address:
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PETS
P.O. Box 4010
Sacramento, CA 95812-4010

From: "James Sanborn" <JSANBORN@oehha.ca.gov>
To: <jcunningham@dfg.ca.gov>
Date: 10/24/2005 7:05:42 AM
Subject: Fwd: Scanned Document

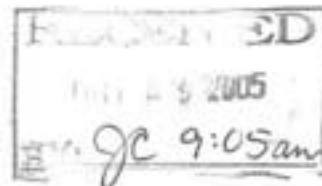
Julie: Here is the information on the inactive Pro-Noxfish...if you cannot open I will try to figure out how to use the FAX machine.

Jim

James R. Sanborn
Staff Toxicologist
Office of Environmental Health Hazard Assessment
(916) 323-2153
(916) 327-7320 Fax
email: Jsanborn@OEHHA.CA.gov

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Sacramento CA

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>>> "Net Surfer" <internet@oehha.ca.gov> 10/24/2005 7:31 AM >>>

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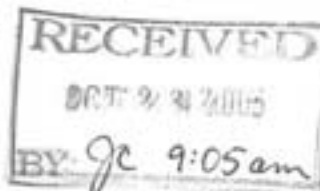
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Current Parameters

Product Names

- PRO-NOXFISH



2 records match

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RTP, NC 27709

INACTIVE (not renewed) (432- 171-AA) **PRO-NOXFISH FISH
TOXICANT LIQUID-EMULSIFIABLE**
INACTIVE (not renewed) (432- 829-AA) **PRO-NOXFISH DUST FISH
TOXICANT**

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Plumas County Public Health Agency

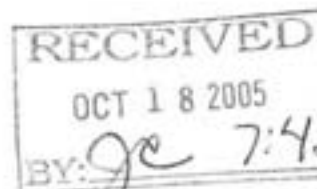
1446 East Main Street, Quincy, California 95971

Henry (Hank) Foley, PH.D., Director

<input type="checkbox"/> Administration & Health Education Post Office Box 3140 Quincy, CA 95971 (530) 283-6337 (530) 283-6425 Fax	<input type="checkbox"/> Clinic & Nursing Services Post Office Box 3140 Quincy, CA 95971 (530) 283-6330 (530) 283-6110 Fax	<input type="checkbox"/> Senior Nutrition & Transportation Post Office Box 3140 Quincy, CA 95971 (530) 283-3546 (530) 283-6425 Fax	<input type="checkbox"/> Environmental Health Quincy Office 270 County Hospital Road Rm. 106, Quincy, CA 95971 (530) 283-6355 (530) 283-6241 Fax	<input type="checkbox"/> Environmental Health - Chester 222 1 st Avenue Post Office Box 1194 Chester, CA 96020 (530) 258-2536 (530) 258-2844
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October 11, 2005

California Department of Fish and Game
P.O. Box 1858
Portola, CA 96122



RE: Lake Davis Pike Eradication Project

Thank you for the opportunity to participate in the planning process for the proposal to eradicate Northern Pike from Lake Davis. In the interest of the best possible outcome for residents of Plumas County, we offer the following input as Public Health Officer, and Public Health Director.

Whenever unknown substances are encountered, fear or suspicion can be a response. Individuals with scientific or technical knowledge may have a tendency to dismiss these feelings. Often, the fears have no basis in fact.

One of our vital roles, as public health officials, is public advocacy. A component of this advocacy is to give weight to public concerns, as well as to scientific information, even if the validity of the public concerns is obscure. We are fully aware that health fears, whether founded in science or not, have a large impact on individual and public health. Witness the release of sarin gas in Tokyo in 1995. Hospitals treated some truly injured. However, the health care system was overwhelmed by large numbers of patients who were uninjured, but who were very concerned. Regardless of the true damage to physical bodies, a large public health impact was realized by the attack.

Even if chemical treatment of Lake Davis is deemed safe by the scientific community, individuals may well be worried, and may have health concerns and even symptoms. Individuals will approach medical clinics, emergency rooms, and the public health department. Therefore, before any chemical treatment of Lake Davis, we feel clinicians and the public need to be provided extensive information. Because of the history of disappointment, distrust, and frustration with the last chemical treatment, sources of information besides Department of Fish and Game will be needed, such as the Department of Pesticide Regulation, the Department of Health Services, and the Office of

Environmental Health Hazard Assessment. Managing chemical exposures is not part of the typical practice of Plumas County physicians and other health care providers. Thus, information needs to include possible symptoms of exposure, assessing the degree of exposure, and procedures for decontamination, if indicated. Health care providers will need access to medical toxicology consultation around the time of any chemical treatment.

Plumas County Health Department, Plumas County Environmental Health, and all health care facilities could well receive a heavy volume of telephone calls from the public around the time of any chemical treatment. This burden could exceed the staff capacity to adequately serve the public. A well-publicized hotline, staffed with individuals experienced and knowledgeable in analyzing risk exposure, could be effective in helping both the public and staff. Although Public Health and Environmental Health are willing to partner with Fish and Game in such a hotline, we do not have the requisite resources and expertise to perform this service on our own.

In the toxicology conference call, a recommendation was made regarding the organization of public hearings. Public meetings have great value, although participants can become quite emotional and confrontational. We would urge you to design the scoping meetings to allow plenty of interaction and input, by using the traditional town hall set-up. Although this might be more difficult at the outset, it offers the distinct advantage of allowing the public's concerns to be heard beforehand, rather than muttered to each other at a later date.

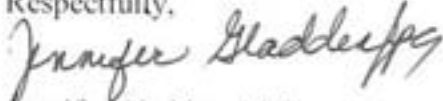
Finally, the ideal situation would be to eradicate the Pike without the use of chemicals. This could be accomplished through a combination of lake draw-down and mechanical removal through netting, electro-fishing and other means. This is the preferred public health alternative. The second best option would be to minimize the use of chemicals. This can be accomplished through a combination of lake level draw-down and the use of a powdered rotenone formula that does not contain other chemical ingredients such as synergists or dispersants. In an effort to guard the public health of Plumas County, which includes their emotional well being, we recommend choosing an alternative which avoids the use of chemicals, other at the very least, limits the nature and extent of chemical introduced into the environment.

In summary, we are requesting that the following be addressed in the Environmental Impact Report:

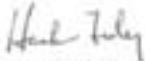
1. Increased need of health care and public health resources, regardless of true medical exposure. How will the project assist health care providers and public health?
2. How will the public be educated about any chemical used? Will information be from a trusted source?

3. How will the health care providers be educated on the chemicals used, possible health effects, diagnosis and treatment of exposure? Who will they consult with for medical toxicological questions?
4. How will increased telephone calls from the public be dealt with? A hotline is one option.
5. And most importantly, minimizing use of any chemicals in the Eradication Project.

Respectfully,



Jennifer Gladden, M.D.
Plumas County Health Officer



Hank Foley, PH.D., Director
Plumas County Public Health Agency



Plumas County Public Health Agency

1446 East Main Street, Quincy, California 95971

RECEIVED
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BY: Jc 1:25 pm mail

Henry (Hank) Foley, PH.D., Director

- | | | | | |
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(530) 283-6425 Fax | <input type="checkbox"/> Clinic & Nursing Services
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Post Office Box 3140
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(530) 283-3546
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270 County Hospital Road
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(530) 283-6241 Fax | <input type="checkbox"/> Environmental Health - Chester
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(530) 258-2536
(530) 258-2844 |
|---|---|---|--|---|

October 27, 2005

Ms. Julie Cunningham
California Department of Fish and Game
Portola Field Office
P.O. Box 1858
Portola, California 96122

RE: Comments Regarding Notice of Preparation
Draft Environmental Impact Report and Initial Study
Lake Davis Pike Eradication Project

Thank you for the invitation to comment on the initial study in preparation of an Environmental Impact Report/Environmental Impact Statement for the above referenced project. Please consider the following as part of this study:

1. Application of a powdered rotenone formula should be seriously considered as one of the project alternatives. This alternative would have many benefits, including limiting the number and type of chemicals introduced into the environment by excluding various synergists and dispersants found in liquid rotenone formulations. This alternative would also help mitigate odors and reported illnesses (such as were reported during the treatment conducted in 1997). It would also help alleviate concerns that have been repeatedly expressed during public scoping sessions over the introduction of chemicals into a domestic drinking water supply. To be effective, this option should be considered in conjunction with lake level drawdown, possibly below the proposed project level of 10,000 to 20,000 acre-feet.
2. Regardless of the project alternative selected, the 10-year individual well testing program should be extended. Currently, Plumas County Environmental Health administers the program to annually test approximately 80 wells for chemicals associated with the treatment of the lake in 1997. We are currently in year 7 of this 10 year program, with completion of the 7th year anticipated in January 2006. This program should be renewed and updated once a project is selected, including:

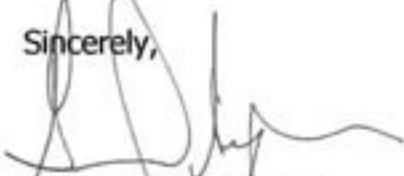
renewing the 10 year commitment to property owners currently in the program; offering the testing option for individuals who have purchased property in the testing area since the prior treatment of the lake; and offering the testing option for owners who have drilled their well since the prior lake treatment. Baseline testing should also be included in this program to quantify existing well water quality before implementing the proposed project.

3. The City of Portola and Plumas County Public Works Department are currently working on a project that will utilize Lake Davis as a drinking water supply in the fall of 2006. Any project alternative that introduces chemicals into this drinking water supply must be closely evaluated for the possible impact to the health of the system users. Alternative drinking water supplies for all system users should be secured for the duration of the treatment. Furthermore, alternative sources should also be utilized during the time chemicals are allowed to attenuate to background levels. Based on the lessons learned through the previous treatment, this plan should allow for contingencies lasting weeks to months. Additionally, a water quality monitoring plan must be developed to ensure that any chemical introduced through an eradication project is tested and found to be below drinking water standards throughout the water column before the lake is used for domestic supply.
4. Many project alternatives specify lake level drawdown as part of the proposal. Although some hydro-geologic analysis has been performed to evaluate the possible connection between groundwater and surface water, further analysis of this issue is needed. Specifically, the relationship between individual well capacities, the depth to stabilized groundwater, and their respective sustained yields may be impacted by draining the lake. Specific impacts of a sustained low lake level needs to be considered as part of any draw-down proposal, and the analysis needs to account for possible drought conditions that could prevent the timely refilling of the lake.
5. Plumas County Code Section 6-5.03 prohibits the introduction of fish poisons and similar chemicals into a surface water body which serves as a drinking water supply. This section of Code must be amended through petition to the Plumas County Board of Supervisors prior to implementing any project alternative other than no project. A copy of this Code section is attached for reference.
6. Any treatment proposal will result in a number of dead fish, and any such accumulation is classified as a solid waste by Plumas County Code. Solid waste must be removed exclusively by a solid waste collector and disposed of in an approved manner. This needs to be addressed in the environmental document.

7. Most project alternatives propose the use of various chemical formulations. The safe storage and handling of these chemicals must be evaluated in the environmental document, and chemical transportation, handling and storage must comply with applicable state laws and statutes.

Environmental Health looks forward to working with you and your contractor to ensure that public health is protected regardless which project alternative is selected. Thanks again for the invitation to comment, and I look forward to seeing the draft environmental document next spring.

Sincerely,

A handwritten signature in black ink, appearing to read 'Gerald Sipe', with a stylized, flowing script.

Gerald Sipe, Director
Plumas County Environmental Health

Cc: Hank Foley, Director, Plumas County Public Health Agency
Dr. Jennifer Gladden, Plumas County Health Officer
Barbara Thompson, Plumas County Counsel
Karl Bishop, Plumas County Agricultural Commissioner
Ron Dykstra, Central Valley Regional Water Quality Control Board
Mike McNamara, Department of Health Services, Division of Drinking Water



Plumas-Sierra Counties

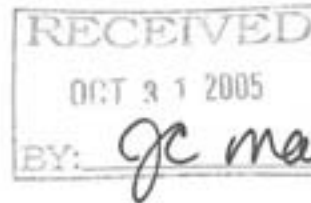
Department of Agriculture

Agricultural Commissioner
Sealer of Weights and Measures



Karl Bishop
Commissioner and Sealer

California Department of Fish and Game
PO Box 1859
Portola, Ca 96122



208 Fairgrounds Road
Quincy, California 95971
Phone: (530) 283-6365
Fax: (530) 283-4210

In response to your request for comments regarding the proposed pike eradication project in Lake Davis I would like to provide my input.

First of all I would like to say that I apologize for not attending one of the scoping meetings in Portola.

As a part of a government agency concerned with exotic, non-native invasive species usually terrestrial weeds, I feel that the pike problem is one that needs to be addressed as soon as possible. There is nothing worse for the environment than an escaped invasive species. Our methods of addressing problems such as this one are varied depending on the situation.

First and most important of all is the prevention of an infestation by exclusion of invasive species. But since this opportunity is long gone this is no longer an option and we must move onto the next step.

Eradication is the next line of defense against an invasive species that has become established but not one that has become common or widespread. I believe that is where we are at this point. The pike may be common in Lake Davis but they are contained in the lake at this time. It is necessary that this species be eradicated before it spreads to other bodies of water in the State.

Finally, management of an invasive species after it becomes more widely established is the last alternative in our attempts to prevent economic and environmental damage to our infrastructure. It is my opinion that we have not yet reached this point yet but if the eradication is not feasible, it would be mandatory that this step be implemented to prevent further spread of this invasive and destructive species and that it is contained in Lake Davis through tough laws and regulations preventing movement from the lake and fail proof barriers preventing it from migrating on its own.

Eradication is still the preferred option at this point in my opinion and should be pursued if it can be accomplished at a reasonable cost with a high expectation of success using a piscicide that has the least impact on the population and the environment.

Thank you for the opportunity to comment and look forward to working with the Department on this project if and when it involves the use of pesticides.

Respectfully,

A handwritten signature in cursive script, appearing to read "Karl Bishop".

Karl Bishop,
Agricultural Commissioner.



California Regional Water Quality Control Board

Central Valley Region

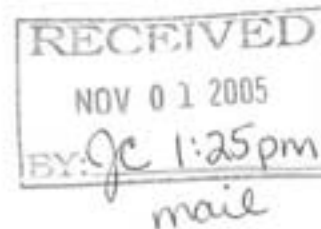


Alan C. Lloyd, PhD
Secretary for
Environmental
Protection

Redding Office
415 Knollcrest Drive, Suite 100, Redding, California 96002
Phone (530) 224-4845 • FAX (530) 224-4857
<http://www.waterboards.ca.gov>

Arnold Schwarzenegger
Governor

27 October 2005



Ms. Julie Cunningham
California Department of Fish and Game
Portola Field Office
P.O. Box 1858
Portola, CA 96122

NOTICE OF PREPARATION OF A DRAFT ENVIRONMENTAL IMPACT REPORT, LAKE DAVIS PIKE ERADICATION PROJECT, PLUMAS COUNTY

We have received the Notice of Preparation and Initial Study regarding the proposed rotenone treatment of Lake Davis to eliminate its Northern Pike population. The use of rotenone in the lake must not affect nearby groundwater to a degree that adversely impacts its use as a potable supply. In addition, acute toxicity in Big Grizzly Creek downstream of Grizzly Valley Dam will be prohibited in the Waste Discharge Requirements (NPDES permit) to be issued for lake treatment.

To satisfy the prohibition on toxicity in Big Grizzly Creek, toxic concentrations of rotenone discharging to the creek must be neutralized; historically the method for neutralization has been addition of potassium permanganate (KMnO_4). However, concentrations of rotenone and organic matter in the lake will vary, and will therefore exert a varying demand for KMnO_4 , resulting in over dosage or under dosage if a constant amount of KMnO_4 is applied to Grizzly Creek (a typical practice in rotenone treatments). Under dosage may result in rotenone toxicity, while over dosage may result in KMnO_4 toxicity. In addition, the neutralization reaction takes approximately one hour to be completed. If adequate volume is not provided at the Grizzly Valley Dam outlet to maintain this residence time, toxicity in Big Grizzly Creek may occur for several miles downstream.

The Initial Study for this project indicates that activated carbon will be investigated as an alternative method of neutralization. As part of the EIR we request that you perform a pilot study with activated carbon to demonstrate its applicability for rotenone neutralization. Literature sources indicate that activated carbon can effectively remove rotenone. If this is the case, this method is likely to be superior to the use of KMnO_4 as it acts essentially instantaneously, and is limited only by the carbon's mass adsorptive capacity for rotenone, rather than the concentration of rotenone being treated, as is the case with KMnO_4 .

Contamination of the potable aquifer appears to be unlikely. The amount of rotenone used will likely be less than in the 1997 treatment, assuming the lake is drawn down to a lesser volume. In addition, if the lake level is lower, the reduced lake hydraulic head will minimize the movement of rotenone and its formulation compounds into the subsurface below the lake. If the lake is not drawn down to a lower

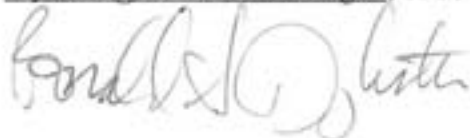


level, the potential for aquifer contamination will be similar to the 1997 treatment; groundwater monitoring since that treatment has not revealed any apparent adverse impacts on the aquifer.

However, if a rotenone formulation differing from that in the 1997 project is used, the Department must analyze for the potential transport of any formulation compounds not addressed in the previous EIR. The EIR must discuss the environmental fate of all components that make up the proposed rotenone formulation, and provide a determination that wells in the vicinity of the lake will not be unacceptably affected by the use of the chosen rotenone product. The EIR should also address the use of powdered rotenone to the greatest extent possible, which would reduce the introduction of solvents and other chemicals to the lake. Regardless of the formulation used, a continued well monitoring program should be proposed, extending beyond the date of the current program, in conjunction with a survey to identify any new wells installed near the lake since 1997. If new wells are present, they should be considered for inclusion in the groundwater monitoring program.

The Department should also propose a program for sediment monitoring for this EIR. This monitoring should assure that concentrations of rotenone and solvents remaining in sediments, if any, do not cause stream toxicity at a later date if large amounts of sediment are flushed out of the lake, for example when dam releases are increased during the winter.

If you have any questions regarding this letter, please contact me at the letterhead address, at rdykstra@waterboards.ca.gov, or at (530) 224-4858.



Ronald S. Dykstra, P.E.
Water Resource Control Engineer

RSD: sae

cc: Mr. Jerry Sipe, Plumas County Environmental Health, Quincy
Mr. Jim Murphy, City Manager, Portola